

What is claimed is:

1. A thermoformable nonwoven fabric composed of filaments of a biodegradable polymer comprising a thermoplastic aliphatic polyester as its principal component, wherein the filaments have a polymer supercool index of 0.3 to 0.6.

2. A nonwoven fabric as set forth in claim 1, wherein the biodegradable polymer is selected from the group consisting of poly-D-lactic acid, poly-L-lactic acid, copolymers of D-lactic acid and L-lactic acid, copolymers of D-lactic acid and hydroxycarboxylic acid and copolymers of L-lactic acid and hydroxycarboxylic acid, copolymers of D-lactic acid, L-lactic acid and hydroxycarboxylic acid, and blends of any of these polymers.

3. A nonwoven fabric as set forth in claim 1, wherein the biodegradable polymer is selected from the group consisting of polybutylene succinate, polyethylene succinate, polybutylene adipate, polybutylene sebacate, polycaprolactone and polypropiolactone, and copolymers essentially comprising a base unit of any of these polymers.

4. A nonwoven fabric as set forth in claim 1, wherein the filaments have a birefringence of  $3 \times 10^{-3}$  to  $15 \times 10^{-3}$ .

5. A nonwoven fabric as set forth in claim 1, wherein the filaments have a polymer crystalline size of 15 to 20Å as measured axially thereof.

6. A nonwoven fabric as set forth in claim 2, which has a boiling water shrinkage percentage of 10 to 40%.

7. A nonwoven fabric as set forth in claim 1 ,  
wherein the polymer contains a nucleating agent.

5        ✓ 8. A method of producing a formable nonwoven  
fabric composed of filaments of a biodegradable polymer  
comprising a thermoplastic aliphatic polyester as its  
principal component, the method comprising the steps of:  
              melting the polymer and extruding the resulting  
melt through a spinneret and forming said melt into  
filaments;  
10        drafting the extruded filaments at a drafting  
speed of 1,000 to 2,500m/min by means of a suction device  
disposed below the spinneret, while quenching the filaments  
with quench air blow;  
              spreading open each other and accumulating the  
15        drafted filaments on a movable collector surface thereby  
to form a web; and  
              treating the web for formation of the nonwoven  
fabric.

20        9. A nonwoven fabric production method as set  
forth in claim 8, wherein the biodegradable polymer is  
selected from the group consisting of poly-D-lactic acid,  
poly-L-lactic acid, copolymers of D-lactic acid and  
L-lactic acid, copolymers of D-lactic acid and  
hydroxycarboxylic acid and copolymers of L-lactic acid and  
25        hydroxycarboxylic acid, copolymer of D-lactic acid,  
L-lactic acid and hydroxycarboxylic acid, and blends of any  
of these polymers.

30        10. A nonwoven fabric production method as set  
forth in claim 8, wherein the biodegradable polymer is  
selected from the group consisting of polybutylene  
succinate, polyethylene succinate, polybutylene adipate,  
polybutylene sebacate, polycaprolactone and  
polypropiolactone, and copolymers essentially comprising a  
base unit of any of these polymers.

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